Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the matter of	)	
	)	
Advanced Television Systems	)	
And Their Impact Upon the	)	MM Docket No. 87-268
Existing Television Broadcast	)	
Service	)	

REPLY COMMENTS OF MSTV

The Association for Maximum Service Television, Inc. ("MSTV") hereby files reply comments to the Second Further Notice of Proposed Rulemaking, 7 FCC Rcd 3340 (1992) ("Second Further Notice"), released in the above-captioned docket on August 14, 1992. MSTV was a signatory to the Joint Broadcaster Comments filed on November 16, 1992 which set forth the unified views of a large cross-section of broadcaster organizations -- one hundred and five in all -- on the allotment and assignment issues raised in the Second Further Notice.

I. THERE IS WIDESPREAD SUPPORT WITHIN THE BROADCAST INDUSTRY FOR A REPLICATION/MAXIMIZATION PAIRING PLAN THAT UTILIZES BOTH VHF AND UHF ALLOTMENTS.

MSTV reiterates the Joint Broadcaster Comments in commending the Commission and its staff for their effective efforts in seeking to permit free, over-the-air, local television service to participate in Advanced Television. The Commission has taken an important step toward this goal by the timely issuance of the Second Further Notice and by actively seeking comment and alternative proposals regarding the challenging task of allotting and assigning ATV channels. Second Further Notice at ¶ 6. Another essential step it has taken is to announce, as its primary objective in allotting ATV

channels, that all existing broadcasters should be accommodated with an ATV channel. Second Further Notice at ¶ 9. This objective was embraced without dissent by the commenters and endorsed wholeheartedly by the Joint Broadcasters.

The Joint Broadcasters also urged the Commission to adopt an assignment/allotment plan that pairs each NTSC channel with a specific ATV channel based on objective replication/ maximization principles. Joint Broadcaster Comments at 14-17. This approach, which is supported by the Commission's ATV Advisory Committee,[1/] flows logically from the Commission's proposal to predicate ATV allotments on the use of existing NTSC transmitter sites. Second Further Notice at ¶ 35. It is designed to replicate existing service to avoid disenfranchising current viewers, maximize ATV coverage wherever possible to allow smaller NTSC stations to expand their ATV coverage, and minimize interference to surrounding NTSC and ATV stations.[2/]

A pairing approach based on these neutral principles would satisfy the greatest number of licensees and the public they serve, provide an appropriate context in which individual

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1/ See Fifth Interim Report of the FCC Advisory Committee on ATV at 12 (March 24, 1992).

2/ Some commenters propose the use of more sophisticated signal prediction methodologies in allotting and assigning ATV channels to take into account such factors as terrain. See Comments of Fox, Inc. (urging use of propagation model such as TIREM); KSCI, Inc. at 3 (supporting use of terrain shielding factors in calculating coverage contours). MSTV agrees that the Commission should use techniques to predict coverage and interference that are practical and effectively approximate actual coverage and interference, see Joint Broadcaster Comments at 5 n.4 (filed July 17, 1992), but believes that this matter is a second-order consideration at this point. The Commission should first establish its general allotment/assignment principles and then fine tune these principles on the basis of effective prediction techniques and test data from the ATV system it selects.

stations can negotiate channel assignments, and avoid a contentious "winners" versus "losers" atmosphere that would delay and possibly frustrate the smooth implementation of ATV. The Joint Broadcasters stated their firm belief that pairing NTSC and ATV channels on the basis of replication/maximization principles offers a far superior approach to the proposal for assigning ATV channels on the basis of a first-to-file/lottery system under which the service radius of all ATV stations would effectively be reduced to 55 miles. The Joint Broadcasters also noted their alarm over the proposal in the Second Further Notice to "pack" ATV allotments into the UHF band. Such an all-UHF plan would require unrealistic co- and adjacent-channel ATV-to-ATV and ATV-to-NTSC spacings among stations, resulting in a significant loss in ATV coverage and increase in interference to surrounding NTSC stations. These adverse consequences would primarily affect existing UHF stations.

There was overwhelming support within the broadcast industry for the assignment/allotment approach set forth by the Joint Broadcasters. In addition to the one-hundred and five signatories to the Joint Broadcaster Comments, support was voiced by many broadcast parties filing separate comments. For instance, the Comments of 25 Television Stations, at 13, urged the Commission to "make allotments based on a 'service replication/maximization' plan such as that proposed by the ATV Advisory Committee and the Joint Broadcasters". See also Comments of H & C Communications at 3; DR Partners at 5.

The 25 Television Stations, along with other commenters, also strongly opposed the 55-mile maximum service area proposal given the significant areas and populations that would lose ATV service under such an approach. Comments of 25 Stations at 11-13. WJAC-TV, the licensee of Channel 6 in Johnstown, Pennsylvania, stated that in its case the 55-mile standard "would literally disenfranchise thousands of present TV viewers", resulting in a "31% loss of audience potential" and a corresponding substantial loss in revenues at a time when it will be faced with the awesome burden of financing ATV implementation. Comments of WJAC-TV at 3-4. See also Comments of Cohen, Dippell and Everist at 6 ("A 50% loss in service area for many VHF stations could result" from the 55-mile service area standard.); H & C Communications at 2-3.

A number of broadcasters also filed separate comments to emphasize their strong opposition to the UHF-packing proposal. The Comments of 25 Television Stations, at 9, stated that the "obvious result" of this proposal would be less extensive ATV service and more NTSC interference that could "cripple ATV before it even leaves the starting gate" by "decreas[ing] opportunity for consumer ATV acceptance and decreas[ing] broadcaster revenues for ATV implementation and operation." See also Comments of APTS, PBS and CPB at 11-12; GHTV, SCI Television, and Busse Broadcasting at 6-7; Fisher Broadcasting at 11-13; DR Partners at 1-6. Parties representing LPTV stations also correctly noted that an all-UHF plan will inevitably have a severe impact on their operations. See

Comments of Island Broadcasting at 2-6; May & Dunne, Chartered. A similar impact, in terms of a substantial loss in service and an increase in interference, will be felt by all UHF stations, including a disproportionate number of noncommercial and independent stations.

Significantly, comments filed by EIA/CEG seriously undermined the notion, set forth in the Second Further Notice, at ¶ 17, that an all-UHF plan can be justified by a belief that it would simplify and lower the cost of ATV receiver equipment. In EIA/CEG's view, "any savings that would result from simplification of this aspect of receiver design would be quite small (just a few dollars in terms of manufacturers' costs), especially in relation to the cost of a large-screen ATV receiver. ... Thus, we do not believe that a UHF-only policy for ATV channel allotments will be of significant consequence in terms of receiver design or expenses to consumers." Comments of EIA/CEG at 2.[3/]

While Paramount Stations Group Inc. ("Paramount") filed comments supporting an all UHF-plan and the establishment of 55-mile service areas for ATV channels, its differences with the Joint Broadcasters' allotment/assignment proposals are more

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3/ It is also worth noting that the transmitters of many station are located in downtown or other residential areas. Some communities have become deeply concerned about potential health hazards to the public from RF radiation emitted by broadcast transmitters, particularly those operating from multi-user sites. A station may therefore face heavy local opposition to adding an additional transmitter. While digital modulation will reduce all power requirements by a factor of ten or so, UHF transmissions will still be at a higher level than VHF. Transmission at these higher levels may satisfy the ANSI RF standard adopted by the Commission, but municipalities may nonetheless impose more severe zoning requirements which may in some instances preclude use of UHF channels at some sites.

apparent than real. Paramount's position is driven by its view that in allotting ATV channels the Commission should attempt to equalize service among all ATV stations. But the Joint Broadcaster approach is in accord with this objective so long as it does not come at the expense of causing interference to existing service and the disenfranchisement of hundreds of thousands of viewers. Indeed, the approach proposed by the Joint Broadcasters is designed to reduce significantly the UHF handicap that currently exists in NTSC. Thus, under the Joint Broadcasters' third replication/ maximization principle, "[w]here possible (that is, without causing new interference to existing NTSC service or preventing other existing stations from achieving HDTV coverage comparable to their existing NTSC coverage), existing stations with smaller NTSC coverage areas would be assigned HDTV channels with greater potential coverage areas up to a maximum of the coverage area of the largest NTSC station in the market." Joint Broadcaster Comments at 6 (filed July 17, 1992); Second Further Notice at ¶ 12 n.16.

Moreover, Paramount's own engineering demonstrates that, without a drastic reduction in service areas to unacceptable levels, complete equalization as well as an all-UHF/55-mile spacing plan are simply not compatible with the vital goals of accommodating each existing broadcasting with an ATV channel and minimizing interference between co- and adjacent-channel NTSC and ATV stations. See Paramount Comments at 6-8 ("[T]he Commission's proposed allotment process fails to take into account potential interference from inadequately

spaced ATV or NTSC co-channel stations ...."). A pairing plan based on replication/maximization principles is necessary to create sculpted, interference-free service areas while at the same providing each station with an ATV channel that will provide ATV coverage comparable to its existing NTSC coverage area and, especially for smaller stations, expand coverage wherever possible.

In any event, it simply does not follow, as Paramount and a few other commenters suggest, that equalization of ATV coverage areas calls for an all-UHF allotment plan.[4/] As a general matter, "the disparity that currently exists between the UHF and VHF bands will be much less significant for ATV service." Second Further Notice at ¶ 8. See also ATSC Comments at 7 (filed December 19, 1992). Furthermore, as noted above, the Joint Broadcaster replication/maximization principles, if adopted, would further eliminate the disparity in the assignment of ATV channels. Planning factors can also be adjusted to assure that the coverage of UHF ATV channels can reach as far in practice as in principle relative to VHF ATV channels. It should also be kept in mind that even under an ATV allotment scheme that uses both the UHF and VHF bands, there will be a substantial number of VHF NTSC stations assigned UHF ATV

4/ KSCI, Inc. notes its approval for an all-UHF plan in the hope that it "will eliminate the existing VHF-UHF disparity", but in the same set of comments supports the use of existing transmitter sites in allotting ATV channels and also states that the "public interest is best served if a licensee's NTSC and ATV service areas are at least comparable, if not identical, so that existing viewers have continued access to the station's signal and will be motivated to acquire ATV receivers." Comments of KSCI, Inc. at 2-3, 5, 6-7.

channels, especially in the larger markets, and these stations will have every incentive to ensure an equal reach for UHF ATV stations.

Not surprisingly, commenters representing the land mobile industry continued to clamor for a UHF-packing plan. See Comments of Land Mobile Communications Council at 5-6 ("LMCC"); Utilities Telecommunications Council 2-3 ("UTC"). They offered little reason for doing so other than to satisfy their spectrum aspirations for the VHF band. Certainly none of these parties set forth any sound engineering or public interest justification for the enormous cost an all-UHF plan would impose in terms of diminished broadcast television service to the public. To the contrary, several land mobile parties essentially concede that an all-UHF plan is not technically viable given the concerns they raise regarding the potential for ATV-land mobile interference under such a plan and their opposition to the Commission's proposed reallocation to ATV of Channels 14, 15 and 16 in Detroit and Cleveland. See Comments of UTC at 3-7; LMCC at 8-11; County of Los Angeles; Associated Public-Safety Communications Officers, Inc ("APSCO"). Their concerns reflect a somewhat realistic assessment of the all-UHF proposal: cramming ATV channels into the UHF band will lead to inadequate spacings between co- and adjacent-channel operations, exacerbating existing land mobile-television sharing conflicts and, more importantly, resulting in a significant loss in ATV coverage and increased interference to existing NTSC UHF stations.

II. LAND MOBILE SHARING ISSUES CAN BEST BE RESOLVED AT A LATER DATE AND BY ALLOCATING ATV CHANNELS FROM BOTH VHF AND UHF BANDS AND REALLOCATING CHANNELS 14, 15, AND 16 IN DETROIT AND CLEVELAND TO ATV.

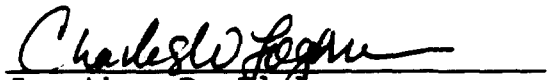
MSTV believes, as noted in the Joint Broadcaster Comments, at 28-29, that the ATV-to-land mobile interference protection standards proposed in the Second Further Notice, at ¶¶ 46-47, are unduly protective of land mobile operations because they are based on land mobile-to-television interference standards even though television is in fact much more susceptible to land mobile interference than the reverse. It would also be premature to establish ATV-land mobile protection standards before sufficient data is available regarding ATV receiver performance and the ATV system selected by the Commission. LMCC candidly acknowledged that it "may be prudent" to wait until "specific characteristics of ATV television receivers are ascertained" to determine the appropriate standards to protect ATV from land mobile interference. Comments of LMCC at 7-8. LMCC, along with other land mobile parties, also raised concerns regarding short-spaced ATV allotments and other aspects of the ATV-land mobile sharing proposals set forth in the Second Further Notice. Comments of LMCC at 8-10; UTC at 5-7; Los Angeles County 2-6; APSCO at 5-9.

There was consequently a general consensus among the commenters that it would be premature for the Commission to adopt ATV-land mobile interference protection standards at this point. Moreover, the comments indicated that the proposed standards are not as a whole satisfactory from either

broadcasters' or land mobile's perspective. MSTV believes that this dissatisfaction will inevitably continue if the Commission proceeds with its plan to pack ATV channels into the UHF band. A workable transition to ATV will require both VHF and UHF band ATV allotments as well as the reallocation to ATV of Channels 14 and 15 in Cleveland and Channels 15 and 16 in Detroit. Only then will the Commission be able to afford reasonable interference protection to both ATV and land mobile.[5/]

Respectfully submitted,

ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.



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5/ The Commission has recognized that "it will be a challenge to provide all full-service licensees with an additional 6 MHz for ATV." Second Report and Order, 7 FCC Rcd 3340, at ¶ 39 (released May 8, 1992). To meet this challenge it will be essential for the Commission to allot to ATV not only Channels 14-16 in Cleveland and Detroit but also Channels 36 and 38 in areas where these channels are vacant, including areas that border a National Radio Quiet Zone. The Commission should consequently reject the suggestion made in comments filed by the National Radio Astronomy Observatory that the Commission should avoid allotting ATV channels on these or other available channels, and further explore the possibility of developing a sharing arrangement for limited use of Channel 37 for ATV in the most congested markets or in the event of an ATV spectrum shortfall.